

Claims

1
2
3 1. A method of operating a file server, said method including steps for
4 identifying a first file on said file server with a first security style selected
5 from among a plurality of security styles; and
6 enforcing said first security style for all accesses to said first file.

7
8 2. A method as in claim 1, wherein said plurality of security styles in-
9 cludes a Windows NT security style.

10
11 3. A method as in claim 1, wherein said plurality of security styles in-
12 cludes a Unix security style.

13
14 4. A method as in claim 1, including steps for
15 associating said first file with a subset of files in a file system; and
16 limiting said subset of files to a security subset of said plurality of security
17 styles;

18 wherein attempts to set permissions in said file system tree are restricted to
19 said security subset.

20
21 5. A method as in claim 4, wherein said security subset includes a
22 Windows NT security style.

1

2 6. A method as in claim 4, wherein said security subset includes a Unix
3 security style.

4

5 7. A method as in claim 1, including steps for identifying said first file
6 with a second security style in response to a file server request.

7

8 8. A method as in claim 7, including steps for associating said second
9 security style with a file server request for setting permissions for said first file when said
10 file server request is successful.

11

12 9. A method as in claim 7, wherein said steps for identifying include
13 steps for translating a first set of permissions associated with said first file in said first se-
14 curity style to a second set of permissions in said second security style, wherein said sec-
15 ond set of permissions is no less restrictive than said first set of permissions.

16

17 10. A method as in claim 1, wherein said steps for enforcing include
18 steps for

19 recognizing a first set of permissions associated with said first file in said
20 first security style;

21 defining a first user type associated with said first security style;

1 translating a user from a second user type associated with a second security
2 style into said first user type; and
3 enforcing a file server request from said second user type using said first
4 user type and said first set of permissions.

5

6 11. A method as in claim 10, wherein said steps for translating are per-
7 formed with regard to access control limits applicable to said first file at a time of said
8 steps for enforcing.

9

10 12. A method as in claim 10, wherein said steps for translating are per-
11 formed with regard to access control limits applicable to said first file at a time said ac-
12 cess control limits are set.

13

14 13. A method as in claim 1, wherein said steps for enforcing include
15 steps for

16 translating a first set of permissions associated with said first file in said
17 first security style to a second set of permissions in a second security style, wherein said
18 second set of permissions is no less restrictive than said first set of permissions; and

19 enforcing a file server request in said second security style using said sec-
20 ond set of permissions.

21

1 14. A method as in claim 13, wherein said steps for translating are per-
2 formed with regard to access control limits applicable to said first file at a time of said
3 steps for enforcing.

4

5 15. A method as in claim 13, wherein said steps for translating are per-
6 formed with regard to access control limits applicable to said first file at a time said ac-
7 cess control limits are set.

8

9 16. A file server including
10 a set of files available said file server, each said file having an associated
11 security style selected from among a plurality of security styles available on said file
12 server;
13 wherein said file server enforces said associated security style for all ac-
14 cesses to said file.

15 17. A file server as in claim 16, wherein said plurality of security styles
16 includes a Windows NT security style.

18

19 18. A file server as in claim 16, wherein said plurality of security styles
20 includes a Unix security style.

21

22 19. A file server as in claim 16, including

1 a subtree of files in said file system associated with a security subset of said
2 plurality of security styles;
3 wherein said file server restricts attempts to set permissions in said subtree
4 to said security subset.

5

6 20. A file server as in claim 19, wherein said security subset includes a
7 Windows NT security style.

8

9 21. A file server as in claim 19, wherein said security subset includes a
10 Unix security style.

11

12 22. A file server as in claim 16, wherein said file server is capable of al-
13 tering the security style associated with said file in response to a file server request.

14

15 23. A file server as in claim 22, wherein said file server is capable of al-
16 tering the security style associated with said file in response to a file server request when
17 said file server request is successful.

18

19 24. A file server as in claim 22, wherein said file server is capable of
20 translating a first set of permissions associated with said file in a first security style to a
21 second set of permissions in a second security style, wherein said second set of permis-
22 sions is no less restrictive than said first set of permissions.

1

2 25. In a file server having a plurality of files, a data structure associating
3 a security style with each said file, said security style being selected from among a plu-
4 rality of security styles available on said file server.

5

6 26. A data structure as in claim 25, wherein said plurality of security
7 styles includes a Windows NT security style.

8

9 27. A data structure as in claim 25, wherein said plurality of security
10 styles includes a Unix security style.

11

12 28. In a file server having a plurality of files and a security style associ-
13 ated with each said file, said security style being selected from among a plurality of secu-
14 rity styles available on said file server, a data structure associating a security subset of
15 said plurality of security styles with a subtree of said files available on said file server.

16

17 29. A data structure as in claim 28, wherein said security subset includes
18 a Windows NT security style.

19

20 30. A data structure as in claim 28, wherein said security subset includes
21 a Unix security style.